

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/576,388
Source: IFWP
Date Processed by STIC: 5/1/06

ENTERED



IFWP

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/576,388

DATE: 05/01/2006

TIME: 11:02:58

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\05012006\J576388.raw

```

3 <110> APPLICANT: THOMAS JEFFERSON UNIVERSITY
4   UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION
6 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR INHIBITING CHOLESTEROL
7   UPTAKE
9 <130> FILE REFERENCE: 003252-053291-PCT
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/576,388
C--> 12 <141> CURRENT FILING DATE: 2006-04-19
14 <150> PRIOR APPLICATION NUMBER: 60/444,475
15 <151> PRIOR FILING DATE: 2003-02-03
17 <160> NUMBER OF SEQ ID NOS: 13
19 <170> SOFTWARE: PatentIn Ver. 3.2
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 339
23 <212> TYPE: PRT
24 <213> ORGANISM: Homo sapiens
26 <400> SEQUENCE: 1
27 Met Ser Thr Val His Glu Ile Leu Cys Lys Leu Ser Leu Glu Gly Asp
28   1           5           10           15
30 His Ser Thr Pro Pro Ser Ala Tyr Gly Ser Val Lys Ala Tyr Thr Asn
31           20           25           30
33 Phe Asp Ala Glu Arg Asp Ala Leu Asn Ile Glu Thr Ala Ile Lys Thr
34           35           40           45
36 Lys Gly Val Asp Glu Val Thr Ile Val Asn Ile Leu Thr Asn Arg Ser
37           50           55           60
39 Asn Ala Gln Arg Gln Asp Ile Ala Phe Ala Tyr Gln Arg Arg Thr Lys
40   65           70           75           80
42 Lys Glu Leu Ala Ser Ala Leu Lys Ser Ala Leu Ser Gly His Leu Glu
43           85           90           95
45 Thr Val Ile Leu Gly Leu Leu Lys Thr Pro Ala Gln Tyr Asp Ala Ser
46           100          105          110
48 Glu Leu Lys Ala Ser Met Lys Gly Leu Gly Thr Asp Glu Asp Ser Leu
49           115          120          125
51 Ile Glu Ile Ile Cys Ser Arg Thr Asn Gln Glu Leu Gln Glu Ile Asn
52   130          135          140
54 Arg Val Tyr Lys Glu Met Tyr Lys Thr Asp Leu Glu Lys Asp Ile Ile
55 145          150          155          160
57 Ser Asp Thr Ser Gly Asp Phe Arg Lys Leu Met Val Ala Leu Ala Lys
58           165          170          175
60 Gly Arg Arg Ala Glu Asp Gly Ser Val Ile Asp Tyr Glu Leu Ile Asp
61           180          185          190
63 Gln Asp Ala Arg Asp Leu Tyr Asp Ala Gly Val Lys Arg Lys Gly Thr
64   195          200          205
66 Asp Val Pro Lys Trp Ile Ser Ile Met Thr Glu Arg Ser Val Pro His

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```

67      210      215      220
69 Leu Gln Lys Val Phe Asp Arg Tyr Lys Ser Tyr Ser Pro Tyr Asp Met
70 225      230      235      240
72 Leu Glu Ser Ile Arg Lys Glu Val Lys Gly Asp Leu Glu Asn Ala Phe
73      245      250      255
75 Leu Asn Leu Val Gln Cys Ile Gln Asn Lys Pro Leu Tyr Phe Ala Asp
76      260      265      270
78 Arg Leu Tyr Asp Ser Met Lys Gly Lys Gly Thr Arg Asp Lys Val Leu
79      275      280      285
81 Ile Arg Ile Met Val Ser Arg Ser Glu Val Asp Met Leu Lys Ile Arg
82      290      295      300
84 Ser Glu Phe Lys Arg Lys Val Gly Lys Ser Leu Tyr Tyr Tyr Ile Gln
85 305      310      315      320
87 Gln Asp Thr Lys Gly Asp Tyr Gln Lys Ala Leu Leu Tyr Leu Cys Gly
88      325      330      335
90 Gly Asp Asp
93 <210> SEQ ID NO: 2
94 <211> LENGTH: 337
95 <212> TYPE: PRT
96 <213> ORGANISM: Danio rerio
98 <400> SEQUENCE: 2
99 Met Ala Leu Val Ser Glu Tyr Leu Ser Lys Leu Thr Leu Ser Tyr Gly
100 1      5      10      15
102 Gly Glu Arg Glu Pro Lys Cys Pro Thr Val Val Ala Ala Tyr Asp Phe
103      20      25      30
105 Asn Pro Glu Val Asp Ala Ala Lys Ile Glu Thr Ala Ile Lys Thr Lys
106      35      40      45
108 Gly Val Asp Glu Gln Thr Ile Ile Asp Ile Leu Thr Arg Arg Ser Leu
109      50      55      60
111 Leu Lys Arg Ser Asp Ile Ala Phe Glu Tyr Glu Lys Arg Ala Lys Lys
112 65      70      75      80
114 Asp Leu Val Ser Ala Leu Lys Gly Ala Leu Ser Gly Ser Leu Glu His
115      85      90      95
117 Leu Ile Leu Gly Leu Met Lys Ser Thr Pro Gln Tyr Asp Ala Phe Glu
118      100      105      110
120 Leu Lys Ala Met Lys Gly Leu Gly Thr Asp Glu Glu Ser Leu Ile Glu
121      115      120      125
123 Met Val Cys Ser Arg Asn Lys Glu Glu Leu Ala Glu Ile Lys Lys Val
124      130      135      140
126 Tyr Lys Glu Met Phe Lys Lys Asp Leu Glu Lys Asp Ile Ser Gly Asp
127 145      150      155      160
129 Thr Ser Gly Asp Phe Ala Lys Leu Leu Leu Ala Leu Ala Gln Gly Asn
130      165      170      175
132 Arg Glu Glu Gln Ser Ser Val Val Asp Tyr Glu Lys Ile Asp Asn Asp
133      180      185      190
135 Ala Arg Thr Leu Tyr Glu Thr Gly Val Arg Arg Lys Gly Thr Asp Val
136      195      200      205
138 Val Thr Trp Ile Ser Ile Phe Ser Glu Arg Ser Val Ser His Leu Gln
139      210      215      220

```

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```

141 Lys Val Phe Glu Arg Tyr Lys Arg Tyr Ser Pro Tyr Asp Leu Lys Glu
142 225                230                235                240
144 Ser Ile Arg Met Glu Val Lys Gly Asp Leu Glu Lys Ser Phe Leu Thr
145                245                250                255
147 Leu Val Glu Cys Leu Glu Asn Lys His Leu Tyr Phe Ala Ser Arg Leu
148                260                265                270
150 Asn Asp Ala Met Lys Gly Lys Ser Val Lys Asp Lys Ile Ile Thr Arg
151                275                280                285
153 Ile Ile Val Ser Arg Cys Glu Val Asp Leu Met Lys Val Arg Ile Glu
154                290                295                300
156 Phe Lys Arg Asn Phe Gly Arg Ser Leu His Gln Thr Ile Ser Glu His
157 305                310                315                320
159 Thr Lys Gly Asp Tyr Gln Arg Ala Leu Leu Asn Leu Val Gly Gly Asp
160                325                330                335

```

162 Asp

165 <210> SEQ ID NO: 3

166 <211> LENGTH: 181

167 <212> TYPE: PRT

168 <213> ORGANISM: Danio rerio

170 <400> SEQUENCE: 3

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171 Met Thr Ser Gly Tyr Lys Asp Gly Thr Pro Glu Glu Glu Tyr Ala His
172 1                5                10                15
174 Ser Pro Phe Ile Arg Lys Gln Gly Asn Ile Tyr Lys Pro Asn Asn Lys
175                20                25                30
177 Glu Met Asp Asn Asp Ser Ile Asn Glu Lys Thr Leu Gln Asp Val His
178                35                40                45
180 Thr Lys Glu Ile Asp Leu Val Asn Arg Asp Pro Lys His Leu Asn Asp
181                50                55                60
183 Asp Val Val Lys Val Asp Phe Glu Asp Val Ile Ala Glu Pro Ala Gly
184 65                70                75                80
186 Thr Tyr Ser Phe Asp Gly Val Trp Lys Ala Ser Phe Thr Thr Phe Thr
187                85                90                95
189 Val Thr Lys Tyr Trp Cys Tyr Arg Leu Leu Thr Ala Leu Val Gly Ile
190                100                105                110
192 Pro Leu Ala Leu Val Trp Gly Ile Phe Phe Ala Ile Leu Ser Phe Ile
193                115                120                125
195 His Ile Trp Ala Val Val Pro Cys Val Lys Ser Tyr Leu Ile Glu Ile
196                130                135                140
198 His Cys Ile Ser Arg Val Tyr Ser Ile Cys Val His Thr Phe Cys Asp
199 145                150                155                160
201 Pro Leu Phe Glu Ala Met Gly Lys Cys Phe Ser Asn Val Arg Val Thr
202                165                170                175
204 Ala Thr Lys Val Val
205                180

```

208 <210> SEQ ID NO: 4

209 <211> LENGTH: 178

210 <212> TYPE: PRT

211 <213> ORGANISM: Homo sapiens

213 <400> SEQUENCE: 4

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/576,388

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Input Set : A:\pto.da.txt

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```

214 Met Ser Gly Gly Lys Tyr Val Asp Ser Glu Gly His Leu Tyr Thr Val
215      1              5              10              15
217 Pro Ile Arg Glu Gln Gly Asn Ile Tyr Lys Pro Asn Asn Lys Ala Met
218      20              25              30
220 Ala Asp Glu Leu Ser Glu Lys Gln Val Tyr Asp Ala His Thr Lys Glu
221      35              40              45
223 Ile Asp Leu Val Asn Arg Asp Pro Lys His Leu Asn Asp Asp Val Val
224      50              55              60
226 Lys Ile Asp Phe Glu Asp Val Ile Ala Glu Pro Glu Gly Thr His Ser
227      65              70              75              80
229 Phe Asp Gly Ile Trp Lys Ala Ser Phe Thr Thr Phe Thr Val Thr Lys
230      85              90              95
232 Tyr Trp Phe Tyr Arg Leu Leu Ser Ala Leu Phe Gly Ile Pro Met Ala
233      100             105             110
235 Leu Ile Trp Gly Ile Tyr Phe Ala Ile Leu Ser Phe Leu His Ile Trp
236      115             120             125
238 Ala Val Val Pro Cys Ile Lys Ser Phe Leu Ile Glu Ile Gln Cys Ile
239      130             135             140
241 Ser Arg Val Tyr Ser Ile Tyr Val His Thr Val Cys Asp Pro Leu Phe
242      145             150             155             160
244 Glu Ala Val Gly Lys Ile Phe Ser Asn Val Arg Ile Asn Leu Gln Lys
245      165             170             175

```

247 Glu Ile

250 <210> SEQ ID NO: 5

251 <211> LENGTH: 19

252 <212> TYPE: PRT

253 <213> ORGANISM: Danio rerio

255 <220> FEATURE:

256 <221> NAME/KEY: MOD_RES

257 <222> LOCATION: (7)

258 <223> OTHER INFORMATION: unidentified amino acid

260 <220> FEATURE:

261 <221> NAME/KEY: MOD_RES

262 <222> LOCATION: (13)

263 <223> OTHER INFORMATION: unidentified amino acid

265 <220> FEATURE:

266 <221> NAME/KEY: MOD_RES

267 <222> LOCATION: (17)

268 <223> OTHER INFORMATION: unidentified amino acid

270 <400> SEQUENCE: 5

W--> 271 Met Thr Ser Gly Tyr Lys Xaa Gly Thr Pro Glu Glu Xaa Tyr Ala His

272 1 5 10 15

W--> 274 Xaa Pro Glu

277 <210> SEQ ID NO: 6

278 <211> LENGTH: 16

279 <212> TYPE: PRT

280 <213> ORGANISM: Danio rerio

282 <220> FEATURE:

283 <221> NAME/KEY: MOD_RES

RAW SEQUENCE LISTING

DATE: 05/01/2006

PATENT APPLICATION: US/10/576,388

TIME: 11:02:58

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\05012006\J576388.raw

```

284 <222> LOCATION: (2)
285 <223> OTHER INFORMATION: unidentified amino acid
287 <220> FEATURE:
288 <221> NAME/KEY: MOD_RES
289 <222> LOCATION: (10)
290 <223> OTHER INFORMATION: unidentified amino acid
292 <220> FEATURE:
293 <221> NAME/KEY: MOD_RES
294 <222> LOCATION: (14)
295 <223> OTHER INFORMATION: unidentified amino acid
297 <400> SEQUENCE: 6
W--> 298 Glu Xaa Asp Asn Asp Ser Ile Asn Glu Xaa Thr Leu Gln Xaa Val His
      299   1             5             10             15
302 <210> SEQ ID NO: 7
303 <211> LENGTH: 12
304 <212> TYPE: PRT
305 <213> ORGANISM: Danio rerio
307 <220> FEATURE:
308 <221> NAME/KEY: MOD_RES
309 <222> LOCATION: (9)
310 <223> OTHER INFORMATION: unidentified amino acid
312 <400> SEQUENCE: 7
W--> 313 Leu Thr Leu Ser Tyr Gly Gly Glu Xaa Glu Pro Lys
      314   1             5             10
317 <210> SEQ ID NO: 8
318 <211> LENGTH: 14
319 <212> TYPE: PRT
320 <213> ORGANISM: Danio rerio
322 <400> SEQUENCE: 8
323 Arg Ser Leu Leu Lys Arg Ser Asp Ile Ala Phe Glu Tyr Glu
      324   1             5             10
327 <210> SEQ ID NO: 9
328 <211> LENGTH: 13
329 <212> TYPE: PRT
330 <213> ORGANISM: Danio rerio
332 <220> FEATURE:
333 <221> NAME/KEY: MOD_RES
334 <222> LOCATION: (4)
335 <223> OTHER INFORMATION: unidentified amino acid
337 <220> FEATURE:
338 <221> NAME/KEY: MOD_RES
339 <222> LOCATION: (11)
340 <223> OTHER INFORMATION: unidentified amino acid
342 <400> SEQUENCE: 9
W--> 343 Val Phe Glu Xaa Tyr Lys Arg Tyr Ser Pro Xaa Asp Leu
      344   1             5             10
347 <210> SEQ ID NO: 10
348 <211> LENGTH: 25
349 <212> TYPE: DNA

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/576,388

DATE: 05/01/2006
TIME: 11:02:59

Input Set : A:\pto.da.txt
Output Set: N:\CRF4\05012006\J576388.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 7,13,17

Seq#:6; Xaa Pos. 2,10,14

Seq#:7; Xaa Pos. 9

Seq#:9; Xaa Pos. 4,11

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/576,388

DATE: 05/01/2006

TIME: 11:02:59

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\05012006\J576388.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:271 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16
L:298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:313 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:343 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0